

PARTER, S. P.

"A Case of a Nonreactive Course of a Transplanted
Cornea in a Trachoma Patient." Vest. Oftalmol.,
27, No. 2, 1948. Jr. Sci. Assoc., Turkmen Republic
Trachomatosis Inst., -cl948-.

PARTESKO, V.G.

On the biological activity of fat oxidation products. Gask. gastr. ent.
vyz. 16 no.3/4:305-307 Ap '62.

1. Ustav vyzivy USSE, red. A. T. Stolbun, CSc.
(OILS)

PARTESHKO, V. G., kand. med. nauk (Kiyev)

International conference on the problem of "fat nutrition".
Vrach. delo no.7:148-149 J1 '62. (MIRA 15:7)

(FAT)

PARTESHO, V.G., kand.meditsinskikh nauk

Vitamin content of bread. Priroda 49 no.8:94 Ag '60. (MIRA 13:8)

1. Institut usovershenstvovaniya vrachey, Leningrad.

(BREAD)

(VITAMINS)

PARTESHKO, A.G.

ser. xides in liver lipid and fatty tissues of experimental animals.
Ukr. fit. 19 no. 5: 10-13, 1967.

1. Katedra fiziologii (zav. - prof. A.G. Mukhin, Len. ngr. i med.
posviatstvennogo ordena Lenina instituta usovershenstv. med. na
vna boy i laboratoriya klinimol. (zav. - kand. med. nauk S.S.
Parteshko) Ukrain'skogo instituta pitaniya, Kiev.

FAKLECHER, V.O.; KURBAN, G.B.

Effect of oxygenation of water from a well on the state of the parietal intestine in animals under experimental conditions. *Tr. Vses. nauch. konf. med. i biolog. nauk*.

1. Kafedra fiziologii i pat. - prof. G.B. Kurban, Institut usovershenstvovaniya vrachev imeni Serdyukova, i cheskaya laboratoriya "Kraiskaya razdelka" - Institut pitaniya i kafedra pat. i fiz. med. prof. Ye.I. Nayka. *Tr. Vses. nauch. konf. med. i biolog. nauk*. Stavlena deystvitel'nyy orden A.G. Shchegoleva.

PARTESHKO, V.G., kand. med. nauk (Kiyev

Biological value of ...
...
...

LESCHENKO, P.D., red.; IARTESHIKO, V.G., red.; KOLQ IYIEVA, M.G.;
BULESHNIK, P.G., red.

[Problems of correct nutrition] Voprosy ratsional'nogo
pitaniia. Kiev, Gosmedizdat, 1964. 129 p. (MIA 1744)

1. Ukrainskiy nauchno-issledovatel'skiy institut pitaniia.

STOVBUN, A.T., red.; PARTESHKO, V.G., red.; ASKALONOV, S.P., red.;
BURYI, V.S., red.; GOVOROVA, M.S., red.; RUDENKO, K.R., red.;
SEREFRIYANAYA, S.G., red.; ZAPLASKAYA, L.A., tekhn. red

[Problems of nutrition] Voprosy pitaniya. Kiev Gosmedizdat,
USSR, 1962 242 p. MIRA 16:7

1. Ukrainskiy nauchno issledovatel'skiy institut pitaniya
NUTRITION

PARTESHKO, V.G. [Parteshko, V.H.], kand.med.nauk

People's university of health and living conditions. Nauka i
zhittia 11 nov 1961-47 0 '61. (MIRA 1961)

1. Zamestitel' direktora Ukrain'skogo nauchno-issledovatel'skogo
instituta pitaniya.

(NUTRITION)

PARTESHKO, V.G., kand.med.nauk

Thiamine content of some vegetables and cooked dishes prepared from them. Gig. i san. 26 no.2:109-110 F '61. (MIA 14:10)

1. Iz kafedry obshchey i pishchevoy gigiyeny Instituta usovershenstvovaniya vrachey imeni S.M.Kirova (Leningrad).
(THIAMINE) (VEGETABLES)

PARTESHKO, V.G.

Thiamine content in various grades of wheat and dietetic bread.
Vop. pit. 19 no. 6:65-69 N-D '60. (MIRA 13:12)

1. Iz kafedry obshchey i pishchevoy gigiyeny (zav. - prof. A.P. Mukhin) Gosudarstvennogo instituta usovershenstvovaniya vrachey imeni S.M. Kirova, Leningrad.
(BREAD) (THIAMINE)

PARTESHKO, V.G.

Physiological and hygienic characteristics of sunflower
phosphatide concentrates. Vop. pit. 22 no.5:39-43 S-0 '63.

(MIRA 17:1)

1. Iz kafedry gigiyeny (zav. - prof. A.P. Mukhin) Lenin-
gradskogo instituta usovershenstvovaniya vrachey i iz bio-
khimicheskoy laboratorii (rukovoditel' - kand. med. nauk
V.G. Parteshko) Ukrainskogo nauchno-issledovatel'skogo
instituta pitaniya, Kiyev.

PARTESHKO, V.G., kand.med.nauk

Use of sunflower phosphatide concentrates for nutritional and medicinal purposes. Vrach. dalo no.5:106-109 My '62. (MED. 1962)

1. Kafedra gigiyeny (zav. - prof. A.P. Mukhin) Leningradskogo instituta usovershenstvovaniya vrachey i biokhimicheskaya laboratoriya Ukrainskogo nauchno-issledovatel'skogo instituta pitaniya (zav. - kand.med.nauk V.G. Parteshko).

(PHOSPHATIDES)
(SUNFLOWER SEED OIL)

PARTESHKO, V.G.

Thiamine content of some Russian food products and the effect of culinary processing on its preservation. Vop. pit. 20 no.6:73-74 N-D '61. (MIRA 15:6)

1. Iz kafedry obshchey i pishchevoy gigiyeny (zav. - prof. A.P. Mukhin) Leningradskogo Ordena Lenina instituta usovershenstvovaniya vrachey.

(THIAMINE)

(CEREAL PRODUCTS)

PARTESHKO, V.G.

Deterioration of medicinal fish oil. Apt. delo 10 no.4:65-68 J1-Ag
'61. (MIRA 14:12)

1. Leningradskiy gosudarstvennyy ordena Lenina institut usovershen-
stvovaniya vrachey.
(FISH OIL)

PARTESHKO, V.G.

Amount of thiamine in wheat flour of different grades. Vop. pit.
20 no.4:75-76 J1-Ag '61. (MIRA 14:7)

1. Iz kafedry obshchey i pishchevoy gigiyeny (zav. - prof. A.P.
Mukhin) Leningradskogo ordena Lenina instituta usovershenstvovaniya
vrachey.

(FLOUR) (VITAMINS B₁)

PARTESHKO, Vasiliy Gerasimovich, kand. med.nauk; SMOLIGOVETS,
P.V., red.; RYMAR, L.S., tekhn. red.

[Fats and their significance in human nutrition] Zhiry
i ikh znachenie v pitanii cheloveka. Kiev, Gosmedizdat
USSR, 1963. 46 p. (MIRA 17:1)

*

AUTHORS: Mikhaylova, L.A., Partashnikova, M.Z.

32-11-47/60

TITLE: The Determination of the Boiling Temperature of Organic Liquids by Means of a Simple Ebulliometer (Opredeleniye temperatury kipeniya organicheskikh zhidkostey pri pomoshchi prostogo ebulliometra)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1388-1391 (USSR)

ABSTRACT: In this paper the applications of various devices are compared, and it was found that the ebulliometer suggested by W. Swjentoslawski (Ebulliometric Measurements N.I., 1950) and improved by L.A.Mikhaylova and A.A. Pryashnikov is best suited for this purpose, but that the Davis apparatus and a similar device developed by Vishnevski-Kamenev was described as being faulty. The advantage offered by the ebulliometer consists in the fact that it is more sensitive and is well applicable for determining the boiling point of mixtures. As an example a toluene-benzene mixture was used, on which occasion certain quantities of one of the components were added for control purposes and the boiling point was newly determined. In the chapter dealing with the method of determining the boiling point of organic liquids in an ebulliometer this experiment is described. After a suitable preparation

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50 ml of the liquids to be examined were introduced into the opening

The Determination of the Boiling Temperature of Organic Liquids by Means of a Simple Ebulliometer 32-11-47/60

of the apparatus, after which it was closed. Two cooling devices and a burner were put into operation. As soon as the liquid began to drop down the flames were regulated in such a manner that 60-80 drops were produced per minute. (This applies to boiling temperatures of less than 110°). In the case of a higher boiling temperature it is recommended to increase the outflow of the liquid up to 100 drops per minute. After a boiling time of 10 minutes temperature was measured every 2 minutes. As soon as the last 5 results were found to be equal, measurements were stopped. The experiment was stopped as soon as the boiling point was found to be unchanged. The temperature values found were corrected according to values at normal pressure. There are 1 figure, 3 tables, and 3 references, 1 of which is Slavic.

ASSOCIATION: Scientific Research Institute for Chemical Reagents (Nauchno-issledovatel'skiy institut khimicheskikh reaktivov)

AVAILABLE: Library of Congress

Card 2/2

PARTISHKO, V.G., kand.med.nauk (Leningrad)

Baker's yeast as a supplementary source of thiamine in bread.
Gig.1 san. 25 no.1:99-100 Ja '60. (MIRA 13:6)

1. Iz kafedry obshchey i pishchevoy gigiyeny Instituta usovershenstvovaniya vrachey.

(VITAMINE B₁)

(BREAD)

(YEAST)

PARTESHKO, V.G., kand.meditsinskikh nauk

Vitamin content of bread. Priroda 49 no.8:94 Ag '60. (MIRA 13:8)

1. Institut usovershenstvovaniya vrachey, Leningrad.
(BREAD) (VITAMINS)

PARTEV, Z.Kh.

A new hypotensive remedy from the sea-blite (*Suaeda physophora* pall.).
Izv.AN Arm.SSR.Biol.i sel'khoz.nauki 6 no.10:65-71 '53. (MLRA 9:8)

1. Institut perelivaniya krovi Ministerstva zdравoskhraneniya
Armyanskoy SSR.

(SEA-BLITE) (VASOMOTOR DRUGS)

PARTEV, Z.Kh.; KALANTAR, N.R.

Evaluation of the role of the cerebellum in hemopoiesis.
Zhur. eksp. i klin. med. 3 no.3:23-32 '63.

(MIRA 17:1)

1. Nauchno-issledovatel'skiy institut gematologii i perelivaniya krovi Armyanskoy SSR.

PARTEV, Z.Kh.

"Conditioned responses in dogs after transection of the upper part of the posterior columns of spinal cord." L.S. Gambarian. Reviewed by Z.Kh. Partev. Izv.AN Arm.SSR.Biol. sel'khoz.nauki 6 no.11: 95-98 '53. (MLRA 9:8)
(CONDITIONED RESPONSE) (SPINAL CORD--SURGERY) (GAMBARIAN, L.S.)

GAMBARYAN, L.S.; MARKARYAN, L.P.; PARTEV, Z. Kh.

Possibility of the development of conditioned inhibition and switching in response to the same stimulus. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 7 no.2:73-79 '54. (MLRA 9:8)

1. Institut fiziologii Akademii nauk Armyanskoy SSR, Fiziologicheskaya laboratoriya Instituta akusherstva i ginekologii Ministerstva zdravookhraneniya Armyanskoy SSR.

(CONDITIONED RESPONSE) (INHIBITION)

PARTEV, Z.Kh., kandidat meditsinskikh nauk.

"Problems of the neutregulation of blood system." V.E. Chernigovskii, A.I.A. Iaroshevskii. Reviewed by Z.Kh. Partev. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki 7 no.11:93-98 # '54. (MLRA 9:8)
(NERVOUS SYSTEM)(CARDIOVASCULAR SYSTEM--INNERVATION)
(CHERNIGOVSKII, V.N.) (IAROSHEVSKII, A. I.)

PARTEV, Z. and ALLAVERDYAN, S.

"USSR meeting of problems of nitrogen metabolism", Meditsinskiy Rabotnik, Vol. 18, No 15, p 4, 1954.

SO:-Translation-W-31356, 15 Jul 1954.

PARTEV, Z.Kh.; ALAVERDYAN, S.N.

~~-----~~
Ruben Osipovich Bolian, 1894-1955,;obituary. Vest. khir. 76 no.11:
167-168 '55. (MLRA 9:4)

(OBITUARIES,
Bolian, R.O.)

EAST GERMANY/Acoustics - Ultrasonics.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 13930

Author : Parthasarathy, S., Pancholy, M.

Inst : -

Title : Studies in Ultrasonic Propagation in Mixtures of Ethyl Alcohol and Water.

Orig Pub : Z. angew. Phys., 1958, 10, No 10, 453-455

Abstract : An investigation was made of the absorption and velocity of ultrasound, the density, viscosity, specific heat, etc. of the mixture as a function of the concentration of the mixture components and of the temperature. The measurements were carried out at a frequency of 21 Mc at temperatures from 5 to 70° C. To investigate the absorption, use was made of the method of pulsed echo. A maximum of absorption was observed at an alcohol concentration of approximately 30%. With the increasing temperature, the value of the maximum drops.

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30(1)

30V/2-50-2-4/1

AUTHOR: Partigal, S.

TITLE: A Document of Historic Importance (Dokument istoricheskogo znacheniya)

PERIODICAL: Vestnik statistiki, 1959, Nr 2, pp 85 - 88 (USSR)

ABSTRACT: The document in question is the stenographical record of the Central Committee of the CPSU plenary session of 15 - 19 December 1958 in which the party accounted for the condition of agriculture. The author dwells on the importance of the decisions taken at the plenum, mentioning the "new way of planning that unleashed the initiative of the kolkhoz peasants". The article includes some figures illustrating the increase in production: the total grain crop of 1958 was 3,508 million pud (1 pud = 16 kg), of which 3,495 million pud was stocked (the grain crop of 1953 was 3,036 million pud). The planned crop for 1965 is 11 - 11 billion.

Card 1/1

PARTIGUL, S.

Some problems of the quality of merchandise. Sov. tovg. 36 no.3:7-11
Mr '63. (MIRA 16:3)

(Commercial products—Standards)

ABRAMOV, V.A.; ALEKSEYEV, A.M.; AL'TER, L.B.; ARAKELYAN, A.A.; BAKLANOV, G.I.;
BASOVA, I.A.; BLYUMIN, I.G.; BOGOMOLOV, O.T.; BOR, M.Z.; BREDEL',
E.Ya.; VEYTSMAN, N.R.; VIKENT'YEV, A.I.; GAL'TSOV, A.D.; GERTSOVSKAYA,
B.R.; GLADKOV, I.A.; DVORKIN, I.N.; DRAGILEV, M.S.; YEFIMOV, A.N.;
ZHAMIN, V.A.; ZHUK, I.N.; ZAMYATNIN, V.N.; IGNAT'YEV, D.I.; IL'IN,
M.A.; IL'IN, S.S.; IOFFE, Ye.A.; KAYE, V.A.; KAMENITSER, S.Ye.;
KATS, A.I.; KLIMOV, A.G.; KOZLOV, G.A.; KOLGANOV, M.V.; KONTOROVICH,
V.G.; KRAYEV, M.A.; KRONROD, Ye.A.; LAKHMAN, I.L.; LIVANSKAYA, F.V.;
LOGOVINSKAYA, R.L.; LYUBOSHITS, L.R.; MALYSH, A.I.; MENZHINSKIY,
Ye.A.; MIKHAYLOVA, P.Ya.; MOISEYEV, M.I.; MOSKVIN, P.M.; NOTKIN,
A.I.; PARTIGUL, S.F.; PERVUSHIN, S.P.; PETROV, A.I.; PETRUSHOV, A.M.;
PODGORNOVA, V.M.; RABINOVICH, M.A.; RYVKIN, S.S.; RYDINA, M.N.;
SAKSAGANSKIY, T.D.; SAMSONOV, L.N.; SMEKHOV, R.M.; SOKOLIKHIN, S.I.;
SOLLERTINSKAYA, Ye.I.; SUDARIKOV, A.A.; TATAR, S.K.; THERENT'YEV,
P.V.; TYAGAY, Ye.Ya.; FEYGIN, Ye.G.; FIGURNOV, P.K.; FRUMKIN, A.B.;
TSYRLIN, L.M.; SHAMBERG, V.M.; SHAPIRO, A.I.; SHCHENKOV, S.A.;
KYDEL'MAN, B.I.; MKHIN, P.B.; MITROFANOVA, S., red.; TROYANOVSKAYA, N.,
tekh.n.red.

[Concise dictionary of economics] Kratkiy ekonomicheskii slovar'.
Moskva, Gos.izd-vo polit.lit-ry, 1958. 391 p. (MIRA 11:7)
(Economics--Dictionaries)

PARTIGULOV, A.S.

Echinococcosis of the pleura. Uch. zap. Stavr. gos. med. inst.
8:154-158 '63 (MIRA 17:17)

1. Khirurgicheskoye otdeleniye (zav. - zasluzhennyy vrach POFER
I.I. Toshinskiy) Yatigorskoy gorodskoy bol'nitsy (glavnyy vrach
A.S. Partigulov).

PARTIGULOV, A.S.

Hydatids of the pleura. Uch. zap. Stavr. gos. med. inst.
12:204 '63. (MIRA 17:9,

1. Kafedra obshchey khirurgii (zav. prof. Yu.S. Gilevich)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta
i khirurgicheskoye otdeleniya (zav. zasluzhennyy vrach
RSFSR I.I. Toshinskiy, Pyatigorskoy bol'nitsy.

Y. I. ... V. K. ... D. N. ... IOPPE, R. M., TSYPLAKOVA, N. A.,
... K. I.

... of ... and ... treatment of residual
... following infectious diseases of the central nervous
system. ... prof. ...
... (1911)

... (sanatory "Morsk" (glavnyy vrach
... prof. N. M. ...)

LAZAREV, V.P.; PARTIN, I.A.; MEDNIKOV, YU.P.

Investigating temperature field by the volume of melts in foundry
furnaces for aluminum alloys. **TSint.** met. 36 no.11:71-74 N 167.
MIRA 17:1)

L 40915-66 EWT(d)/EWT(m)/EWP(f)/EWP(c)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(h)/FWP(l)
ACC NR: AP6020739 IJP(c) JD/HW/JH SOURCE CODE: UR/0136/66/000/006/0072/0076

AUTHOR: Mochalov, P. P.; Dogadin, B. V.; Partin, I. A.

ORG: none

TITLE: Adaptation of plant equipment for single sheet annealing of aluminum alloys

SOURCE: Tsvetnyye metally, no. 6, 1966, 72-76

TOPIC TAGS: aluminum alloy, annealing, metallurgic furnace

ABSTRACT: The authors describe basic designs and subsequent in-plant modifications of KAPZ-5 and KAPZ-7 conveyor type annealing furnace systems, capable of annealing sheets 0.8 to 3.5 mm thick and with maximum dimensions of 2000x5000 and 2000x7000 mm respectively. Two chain conveyor systems, powered by a single P-91 32-kw d-c motor, transport each sheet separately through a rectangular vertical hot air furnace chamber. The sheet suspension system is treated in detail. The overall installation is easily incorporated into a factory flow line. Productivity is 1.5 to 3.5 t/hr, depending on the thickness of the 7000 mm sheet. The reject factor averaged 0.22%. Temperature gradients across the annealed sheet did not exceed 3 to 5C. Major components of the system are described and illustrated. Material specifications are given for parts subject to significant wear and temperature variations.

Card 1/2

UDC: 669.716:621.78

PETUKHOV, I.M.; PARTIN, I.I.

Undermining double stall, steeply pitching seams of "Kapital'naya"
no. 2 mine in the Kizel Basin, to prevent rock bumps. Ugo'l' 32 no.
5:13-18 My '57. (MLRA 10:5)

1. Nachal'nik tekhnicheskogo otdela tresta Stalinugol'. (for
Petukhov). 2. Glavnyy inzhener shakhty No. 2 "Kapital'naya."
(for Partin).

(Kizel Basin--Coal mines and mining)

(Subsidence (Earth movements))

PARTIN, M.Ya., Inzn.

Effect of minor mechanization in the use of the active time
of machines and on the change in labor productivity of workers
of mechanized professions. Author. Kuchuk. no. 10:34-347. 1944.
(1944)

TITOVA, I.Ye.; PARTINA, T.

Characteristics of the solution of zinc in orthophosphoric acid.
Zhur.prikl.khim. 35 no.10:2343-2346 0 '62. (MIRA 15:12)
(Zinc) (Phosphoric acid)

DOBROVOL'SKIY, I.P.; PATRIKEYEVA, L.M.; Prinimall uchastiye: CHERVOV, A.P.;
KOSTENKO, A.R.; PARTINA, T.V.

Utilization of pitch distillates for the production of high
temperature pitch. Koks i khim. no.4:48-50 '61. (MIRA 14:3)

1. Chelyabinskiy metallurgicheskiy zavod (for Dobrovol'skiy, Patrikeyeva).
(Chelyabinsk—Pitch)

ACC NR: AP7002827

SOURCE CODE: UR/0142/66/009/006/0714/0718

AUTHOR: Boyanov, Y. D.; Baynov, D. D.; Marinov, Yu. P.; Partinova, N. A.

ORG: none

TITLE: Theory of transistorized LC-oscillators having n oscillatory circuits

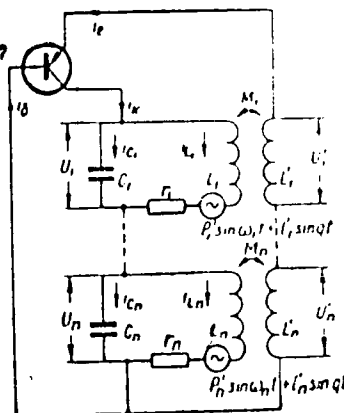
SOURCE: IVUZ. Radiotekhnika, v. 9, no. 6, 1966, 714-718

TOPIC TAGS: electronic oscillator, transistorized oscillator, *oscillator theory*

ABSTRACT: A theory is set forth of an n-circuit transistorized oscillator that has inductive feedback and is excited by external harmonic voltage (see figure). The transistor is connected in a common-base circuit, and the coupled oscillatory circuits are connected to its collector. Operation of this oscillator is described by differential equations, examination of whose solutions yields this condition of asymptotic stability:

$$2b_n + 2V_n + d_n E^2 < 0,$$

$$(\kappa = 1, 2, \dots n).$$



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UDC: 621.373.52.11

ACC NR: AP7002827

in the general (nonresonance) case. In the notation of the article, the above condition means that, in order to ensure stable oscillations, the oscillatory-circuit parameters and the oscillator operating regime should be so proportioned that r_k is very small and β_0 and b , negative; transistor voltage gain, $\beta = \beta_0 + aU_e + bU_e^2$. Further examination shows that the same stability condition holds true for resonance case. Orig. art. has: 1 figure and 25 formulas.

SUB CODE: 09 / SUBM DATE: 01Nov65 / ORIG REF: 003 / OTH REF: 001

Cont 2/2

PARTIS, J.; FARNIK L.

Principles of rational dispensation (prescription and distribution) of eye glasses and other corrective and therapeutic optical aids. Cesk. oftal. 21 no.2:141-144 Mr '65.

MODR, Z., MUDr.; PARTIS, J., PHMR.; BOUKAL, J., MUDr.; DOBKÝ, E., MUDr.

Problems of objective drug prescription. Cesk. zdravot. 7 no.9:
518-532 Oct 59.

1. Interní katedra UDL Praha, Lékařenský Odbor, Léčebně preventivní
odbor ministerstva zdravotnictví, Vědecký ústav hematologie a krevní
transfúze.

(PRESCRIPTIONS:)

KOLESA, J.; HEDLICH, J. Technická monografie: SOBOTKOVA, J.; PAREL, L.

The effect of elevated body temperature on the functions of the respiratory system in chronic asthmatic bronchitis. Bratisl. lek. listy 45 no.10:503-507 31 May 65.

1. Fyziatricka klinika Lekárskej fakulty Univerzity Komenského v Bratislave a Ústavný ústav pre fyziatriu, balneológiu a klimatológiu v Bratislave (vedúci: prof. MUDr. J. Hergol).

PARTLOVA, V.; ECKERTOVA, L.

Maximum of thermoemission and photoemission of a silvercesium photocathode.
p. 215.

ČESKOSLOVENSKÝ ČASOPIS PRO FYSIKU. (Ceskoslovenka akademie ved. Ústav Technické fyziky) Praha, Czechoslovakia. Vol. 9, no. 2, 1959.

Monthly List of East European Accessions (EEAI) LC. Vol. 9, no. 2, February 1960.

Uncl.

COUNTRY : Czechoslovakia
 CATEGOR :
 ASS. JOUR. : RUSKAYA, No. 22 1968, No. 175-
 AUTHOR : Partlova, M. and Vokertova, L.
 INST. : Not given
 TITLE : Thermomission and photoemission Maxima of Silver-Cesium Photocathode
 ORIG. PUB. : Czechoslov Jaspov Fyz, 9, No. 1, 215-217 (1968);
 Czechoslov Fiz Zhur, 9, No. 1, 167-257 (1968)
 SUMMARY : The authors have investigated the question whether the thermomission and photoemission peaks during the activation of an Ag-Cs photocathode occur simultaneously or not. The photocathode was illuminated with a 15-watt incandescent lamp placed at a distance of about 5 cm. In many cases the times required for the attainment of maximum photoemission and maximum thermomission were found to be different. The authors conclude that optimum internal structure of the

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PARTLOVA M.

The maximum of thermoemission and photoemission of
silver-cesium photocathodes. M. Partlova and L. Ecker-
tova (Karlova Univ., Prague). *Czechoslov. J. Phys.* 9,
203-5(1959)(in Russian).—The time and temp. dependence
of the electron emission current are studied.

A-K

R

CZECH/37-59-2-16/20

AUTHORS: Marie Partlová, Ludmila Eckertová

TITLE: Letter to the Editor: The Maximum of Thermal Emission and Photo-Emission of a Silver Caesium Photo-Cathode

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 2, pp 215-217

ABSTRACT: In the literature (eg Ref 1) it is usually stated that during the activation of a silver caesium photo-cathode, the maximum of thermal emission and photo emission occurs at the same time. Because it is experimentally easier to observe thermal emission, one uses the maximum in thermal emission as an indication that the activation of the photo-cathode has been completed. However, this is not always so. The current due to thermal emission was registered and, during illumination, the photo current was measured. In our arrangement, I_{max} and $I_{\text{f max}}$ were of the same order of magnitude. The light was switched on for short periods only (approximately 1 second). It has been found that the time of activation needed to reach one maximum was usually different from that needed for the other (see Figs 1a and 1b - the dotted line shows the photo emission while

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CZECH/37-59-2-16/20
Letter to the Editor: The Maximum of Thermal Emission and Photo-
Emission of a Silver Caesium Photo-Cathode

the full line shows the thermal emission).
There are 1 figure and 3 references, of which 2 are
Soviet and 1 Czech.

ASSOCIATION: Katedra vysoké frekvence a vakuové techniky
matematicko-fyzikální fakulty Karlovy university,
Card 2/2 Praha (Chair of High Frequency and Vacuum Technology,
Charles University, Prague)

SUBMITTED: October 25, 1958 ✓

CZECH/37-59-2-16/20

AUTHORS: Marie Partlová, Ludmila Eckertová

TITLE: Letter to the Editor: The Maximum of Thermal Emission
and Photo-Emission of a Silver Caesium Photo-Cathode

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 2,
pp 215-217

ABSTRACT: In the literature (eg Ref 1) it is usually stated that during the activation of a silver caesium photo-cathode, the maximum of thermal emission and photo emission occurs at the same time. Because it is experimentally easier to observe thermal emission, one uses the maximum in thermal emission as an indication that the activation of the photo-cathode has been completed. However, this is not always so. The current due to thermal emission I_t was registered and, during illumination, the photo current was measured. In our arrangement, $I_{t\max}$ and $I_p\max$ were of the same order of magnitude. The light was switched on for short periods only (approximately 1 second). It has been found that the time of activation needed to reach one maximum was usually different from that needed for the other (see Figs 1a and 1b - the dotted line shows the photo emission while

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1/2

CZECH/37-59-2-16/20

Letter to the Editor: The Maximum of Thermal Emission and Photo-Emission of a Silver Caesium Photo-Cathode

the full line shows the thermal emission).

There are 1 figure and 3 references, of which 2 are Soviet and 1 Czech.

ASSOCIATION: Katedra vysoké frekvence a vakuové techniky
matematicko-fyzikální fakulty Karlovy university,
Card 2/2 Praha (Chair of High Frequency and Vacuum Technology,
Charles University, Prague)

SUBMITTED: October 25, 1958 ✓

POKORNY, J.; REINIS, Z.; MESTAN, J.; PANTLOVA, O.

Ischemic disease of the heart in patients with thromboangitis obliterans. Acta univ. carol. [med.] Suppl. 14:463-468 '61.

1. IV. interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. M. Fucik.
(THROMBOANGIITIS OBLITERANS compl) (CORONARY DISEASE etiol)

PARTOLIN, F., kand. ist. nauk

History of Lenin's party inspires great deeds in the name of
communism. ("History of the Communist Party of the Soviet Union."
Reviewed by F. Partolin). Sov. profsoiuzy 7 no.13:6-11 J1 '59.
(MIRA 12:10)

(Communist Party of the Soviet Union)

1. Introduction

2. Background information on the project
porous media, and the role of the
"88" in the process.

3. Description of the experimental setup
and the results of the experiments.

MOROZOVA, Ye.A. (Moskva); PARTON, V.Z. (Moskva)

Effect of stiffeners on the spread of cracks. PFTF no. 5:112-1.4
S-O '61. (MIRA 14:12)

(Deformations (Mechanics))

L 9284-66 ENT(d)/ENT(m)/ENT(w)/T/ENT(t)/ENT(b) JM/EM

ACC NR: AP5027276

SOURCE CODE: UR/G207/65/000/005/0094/0097 38

AUTHOR: Parton, V. Z. (Moscow)

ORG: none

TITLE: On one evaluation of mutual fixing of cracks in a checkerboard pattern

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 5, 1965, 94-97

TOPIC TAGS: elasticity, elasticity theory, failure prediction, stress analysis, material failure, material strength

ABSTRACT: The problem of checkerboard crack failure patterns in an elastic planar substance is studied. The solution approach is to observe the mutual securing of such cracks as proposed by Ya. B. Zel'dovich. The question is investigated on the basis of a numerical solution of the elasticity theory problem in an approximation framework. The problem is defined with the aid of Fig. 1 and the following definitions: a dual-periodic system of cracks is studied in which the length of each crack is 2ℓ ; ω_1 and ω_2 are the basic periods, D is the domain occupied by the body (material), $M_{kk'}$ is the crack contour whose center is at the point

$$P = k\omega_1 + k'\omega_2 \quad (k, k' = 0, \pm 1, \pm \dots).$$

The lattice is symmetrical about the x and y axes, and each crack is subjected to a

Card 1/3

L 9284-66

ACC NR: AP5027276

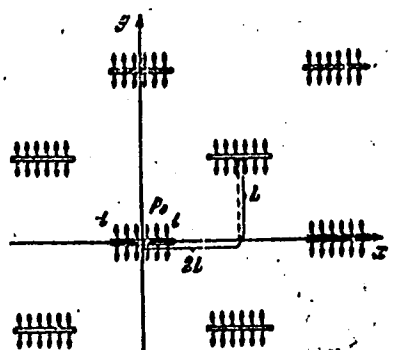


Fig. 1.

uniform tensile stress p_0 . The given problem reduces to one of finding two functions $\phi(z)$ and $\psi(z)$ which are regular in D and which satisfy the boundary condition

$$\overline{\Phi(\tau)} + \Phi(\tau) + \overline{\tau}\Phi'(\tau) + \Psi(\tau) = -p_0.$$

The approximate solution is derived from consideration of a single linear crack in an infinite plate exposed to a uniform boundary stress. The stress function for the dipole system with centers at P is given by the Weyerstrass function.

$$\Psi(z) = \frac{c}{z^2} + c \sum_{k,k'} \left[\frac{1}{(z - \beta)^2} - \frac{1}{\beta^2} \right].$$

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L 9284-66

ACC NR: AP5027276

2
of which the second term constitutes the stress function alongside a crack. A solution for the cycling of stress with length (a coordinate direction) in the material is derived in terms of dimensionless parameters and plotted. The deformation caused by the cyclical stress is discussed in relation to checkerboard failure patterns. The author thanks G. I. Barenblatt for his direction and assistance. Orig. art. has: 5 figures and 9 equations.

SUB CODE: 20/ SUBM DATE: 11May65/ ORIG REF: 004

CC
Card 3/3

PARTOS, A.

"Some problems of the approach to Ronk Mountain." p. 173.

ERDESZETTUDOMANYI KOZLEMENYEK. Erdomernoki Foiskola. Az Erdomernoki
Foiskola Kozlemenyei Sopron, Hungary, 1955

Monthly List of East European Accessions (EEA1) LC, Vol. 8, No. 6, June 1959
Uncl.

PARTOS, A.

Problems of removing felled timber in the Borzsony Mountains, p. 265,
AZ ERDO, (Országos Erdészeti Egyesület) Budapest, Vol. 5, No. 6,
June 1956

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 5, No. 11, November 1956

PARTOS, Gyula, nyugalmazott igazgató

Protection of arable land. Levegő tisztasági 10 no.1 8-12 Ja-Mr
'65.

1. Scientific Institute of Forestry.

PANOV, Mikhail Dmitriyevich, kand. ekonom. nauk; PANTOSH, L.Z., red.;
RAKITIN, I.T., tekhn. red.

[Dissipation and luxury amidst destitution] Rastochitel'stvo i
roskosh' sredi nishchety. Moskva, Izd-vo "Znanie," 1962. 31 p.
(Novoe v zhizni, na ke, tekhnike. III Seriya: Ekonomika, no.7)
(MIRA 15:6)

(Capitalism)

YARYGIN, A.; PARTOSH, S.

Loading logs in large bundles on trucks. Sel'stoi. 13
no. 3:20-21 Mr '59. (MIRA 12:5)

1. Glavnyy mekhanik Tyumenskoy lesozagotovitel'noy kontory (for Yarygin).
2. Starshiy inzhener otдела lesozagotovok Glavkolkhoz-stroya Ministerstva sel'skogo khozyaystva RSFSR (for Partosh).
(Lumber--Transportation)
(Loading and unloading)

PARTOSH, S., inzhener.

Simple device for loading operations. Sel'.stoi. 11 no.12:
25-26 D '56. (MLRA 10:2)

(Loading and unloading)

PARTOV, N.

Improving work in the Maritsa Coal Mine Basin. p. 43.

Vol. 10, No. 4,
July/August, 1955.
MINNO DELO
Sofiya, Bulgaria.

SOURCE: East European Accessions List, (EEAL) Library
of Congress, Vol. 5, No. 1, January, 1956.

TUULIETS, A.V.; PARTS, E.O.; PLOOM, L.R.

Thermal effects of the reaction of methyl- and ethyl magnesium bromide with some ketones. Zhur.ob.khim. 33 no.10:
3124-3126 0 '63. (MIRA 16:11)

1. Tartuskiy gosudarstvennyy universitet.

L 74244-66 EWT(m)/EWP(t)/EWP(b) JD/WW/JG
 ACC NR: AP5024913

UR/0382/65/000/003/0127/0138

AUTHOR: Paras, I.P.

ORG: None

TITLE: Distribution of electromagnetic field in liquid metal converters

SOURCE: Magnitnaya gidrodinamika, no. 3, 1965, 127-138

TOPIC TAGS: magnetohydrodynamic converter, power converter, liquid metal converter
 liquid metal converter theory, converter electromagnetic field

ABSTRACT: The principle of the unipolar liquid metal converter is illustrated in Fig. 1. An electroconductive fluid filling the channel (7), is

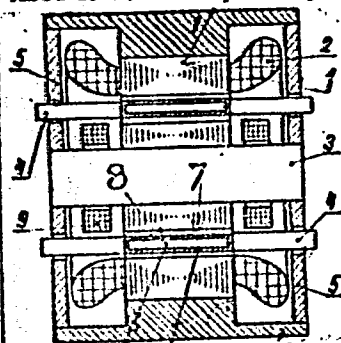


Fig 1. An electroconductive fluid filling the channel (7), is rotated by the interaction of a rotating magnetic field produced by the A.C. energized stator (1) and its winding (2) with currents induced in the fluid (8), usually some liquid metal or alloy. Another, steady magnetic field created by the excitation winding (9), passes thru the liquid and generates a steady low voltage EMF; this is tapped at load terminals (4). The present work analyses the distribution of the electromagnetic field in the converter and its design variables, with a consideration of air gaps and conductive walls. Cer-

Cord 1/2 7

UDC: 621.313.291:538.4

L 14244-66

ACC NR: AP5024913

tain simplifications are made. Also, because of the turbulent state of liquid metal flows in converters, the velocity of liquid is assumed constant throughout a given cross-section. The analysis starts with a simplified Maxwell equation system

$$\text{rot } \vec{H} = \vec{J} \quad (1)$$

where $\vec{H}$ is the vector of magnetic field intensity and $\vec{J}$ the vector of the density of conductivity current. Subsequent approach is aimed at the determination of the vector potential of the magnetic field: its space derivatives yield flux densities, and its time derivative gives the electric field vector. Detailed analysis is developed for the various constructional components and regions of the converter. For the solution of certain basic Poisson equations in rotating coordinates, use is made of the Angst method of variable separation, published before (G. Angst, Power Apparatus and Systems, 1962, 58, 902). Orig. art. has 3 figures, 71 formulas.

SUB CODE: 20, 10/

SUBM DATE: 22Jun64/

ORIG REF: 003 OTH REF: 001

CC
Cord 2/2

1. SVERDLOV
ACC NR: AP6000948

SOURCE CODE: UR/0286/65/000/022500340000

AUTHOR: Parts, I. R.

ORG: none

TITLE: Converter of alternating current to direct current. Class 71, No. 1262.

SOURCE: Byulleten' izobreteniy i otkrytiy, no. 22, 1965, 35-36.

TOPIC TAGS: rectifier, electrical equipment

ABSTRACT: This Author Certificate presents a converter of alternating current to direct current (see Fig. 1). The converter contains an asynchronous motor and a homopolar generator with a common rotor. The rotor is in the form of a conducting liquid which fills the circular stationary chamber established in the air gap. The design improves the energy parameters. A solid ring of material with a high electrical conductance and a specific weight less than the conducting liquid is positioned inside the stationary chamber.

Cord 1/2

DOC: 621.314.53 (621.313.291

L 19865-00
ACC NR: AF6000948

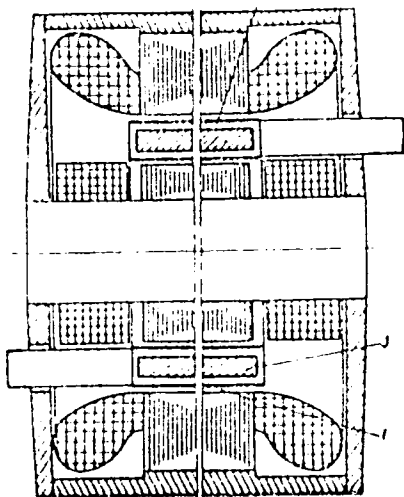


Fig. 1. 1 - Circular stationary unit;
2 - conducting liquid;
3 - solid ring.

Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 17Feb64

Card 2/2

PARTS, I.R.

Distribution of the electromagnetic field in liquid metal in
generators. Mag. gidr. no.3:127-138 '65.

(1970) (25/10)

I 04454-67 EWT(m)/EWP(t)/ETI JD/WVI/JG

ACC NR: AP6014147

SOURCE CODE: UR/0143/65/000/012/0030/0036

AUTHOR: Parts, I. R. (Engineer)

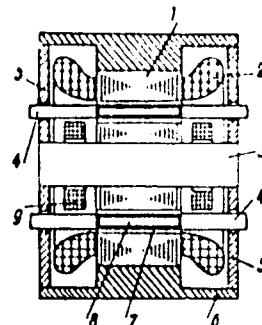
ORG: Tallin Polytechnic Institute (Tallinskiy politekhnicheskiy institut)

TITLE: Magnetic hydraulics of a unipolar converter

SOURCE: IVUZ. Energetika, no. 12, 1965, 30-36

TOPIC TAGS: magnetohydrodynamics, ac dc converter, unipolar converter

ABSTRACT: The development of a ZhUP-1 unipolar ac/dc converter at the Scientific Research Electrotechnical Institute, EstSSR, is reported. The current flowing in winding 2 of field system 1 (see figure) supplied by 3-phase power produces a rotating magnetic field. This field intersects liquid-metal channel (core) 3 which has its own field produced by d-c winding 9. Other parts: 4 - electrode; 5 - shield; 6 - frame; 7 - channel; 8 - liquid metal. The distribution of speeds of the laminar liquid-metal flow in the converter core is theoretically explored; the developed formulas permit calculating the metal



Unipolar ac/dc converter

Card 1/2

UDC: 621.314.5

L 04454-57

ACC NR: AP6014147

speed in a channel with insulating or conducting walls. Theoretical and experimental plots of average metal speed vs. magnetic-induction first harmonic are shown. Orig. art. has: 4 figures and 38 formulas. D

SUB CODE: 09 / SUBM DATE: 20Aug64 / ORIG REF: 005

Card 2/2 *egk*

PARTS, L. Yu.

Mechanization and automation of geological prospecting is an important factor in the prevention of accidents. Razved. i okh. nedr 26 no.10:53-54 O '60. (MIRA 13:11)

1. Ministerstvo geologii i okhrany nedr Kazakhskoy SSR.
(Boring machinery--Safety measures)
(Automatic control)

L 14229-66 • EWT(d)/EWT(1)/EWT(m)/EWP(w)/EPP(n)-2/EWA(d)/EWP(v)/T-2/EWP(t)/EWP(k)/EWP(z)/
ACC NR: AP5024910 EWP(b)/EWA(h)/ETC(m)-6 IJP(c) UR/0382/65/000/003/0111/0113

MTW/JD/WW/JG/EM

AUTHOR: Parts, P.P.; Reymal, L.P.; Tecaru, V.A.

ORG: None

TITLE: A simplified determination of the short circuit current in an asynchronous induction pump with a helical channel

SOURCE: Magnitnaya gidrodinamika, no.3, 1965, 111-113

TOPIC TAGS: magnetohydrodynamic pump, induction pump design, helical induction pump design

ABSTRACT: This paper presents a simplified approach to short circuit current determination in the design of helical induction pumps. It is suggested to consider the short circuit current of an actual pump as equivalent to the short circuit current of a corresponding ordinary polyphase induction motor with a hollow cylinder rotor, and to use its short-circuit magnitude for the determination of the short-circuit current of the helical induction pump. Justification of this approach rests on the experience that channels of helical induction pumps used for pumping of liquid metal alloys are made of materials with low electrical conductivity (e.g., stainless steel X18H9T). A similar low conductivity is possessed by the liquid alloys pumped, e.g. by the lead-calcium alloys. An expression for the short circuit current is determined analytically, and the results compared with those experimentally determined in pumps having their channels

Cord 1/2

UDC 621.689:538.4

L 14229-66

ACC NR: AP5024910

and liquid metal filling substituted by hollow cylinders of stainless steel. The results turned out to be satisfactory. It is also found experimentally that the analysis remains valid in the case of a thin (.8 mm) wall hollow copper cylinder rotor. The simplified method of short-circuit current calculation is proposed for general use in the design of induction pumps with low electrical conductivity active members, and in special cases, for thin high conductivity active pump members. Orig. art. has 1 table, 8 formulas.

SUB CODE: 13,09 SUBM DATE: 30Jul64/

ORIG REF: 003 OTH REF: 000


Card 2/2

PARTS, R.

Inductive reactance due to the main magnetic field in a linear cylindrical pump. Izv AN Est SSR Ser fiz-mat i tekhnauk no.4: 313-318 '61.

1. Academy of Sciences of the Estonian S.S.R., Institute of Energetics.

PARTS, R.R., inzh. (Tallin)

Method of the removed rotor. Elektrichestvo no.6:88-90 Je '61.
(MIRA 14:10)
(Electric machinery)

PARTS, ROMEO RUDOL'FOVICH, aspirant

Mechanical constant of a d.c. machine with a printed rotor winding. Izv. vys. ucheb. zav.; elektromekh. 4 no.6:67-69
'61. (MIRA 14:7)

1. Kafedra avtomaticheskikh i izmeritel'nykh ustroystv
Novocherkasskogo politekhnicheskogo instituta.
(Electric machinery--Direct current)

IESGOVOROVA, Ye.D., kand.tekhn.nauk; KAASIK, P.Yu., kand.tekhn.nauk;
PARTS, R.R., inzh.; BORISOV, A.P., inzh.

Basic principles for designing regulated asynchronous motors.
Vest. elektroprom. 32 no.4:68-71 Ap '61. (MIRA 15:5)
(Electric motors, Induction)

PARTS, R.R. (Tallin)

Electromotive forces induced in the rotor winding of an
asynchronous machine with a large air gap. Elektrichestvo
no.3:37-42 Mr '62. (MIRA 15:2)
(Electric machinery)

PARTS, R.R. (Tallin); RAYG, A.P. [Raig, A.] (Tallin)

Use of a damper winding in d.c. motors with printed armature
windings. Elektrichestvo no.11:50-53 N '62. (MIRA 15:11,
(Electric motors, Direct current)

PARTS, Romeo Rudol'fovich, aspirant

Equivalent resistances of the secondary circuit in the presence
of maximum slipping. Izv. vys. uch. zav.; elektromekh. 5 no.3:
849-859 '62. (MIRA 15:8)

1. Kafedra elektricheskikh mashin Leningradskogo politekhnicheskogo
instituta.

(Electric machinery)

PARTS, Romeo Rudol'fovich[Parts, Romeo]

Machining of the inner surface of pipes using the rotor of an asynchronous motor. Izv. vys. ucheb. zav.; elektromekh. 5 no.11:1303-1305 '62. (MIRA 16:1)

1. Nachal'nik laboratorii elektricheskikh mashin i apparatov nauchno-issledovatel'skogo elektrotekhnicheskogo instituta upravleniya mashinostroyeniya Soveta narodnogo khozyaystva Estonskoy SSR.

Electric motors, Induction) (Pipe)

PARTS, R.

Exact determination of the distribution of a magnetic field
in electric machines with a small airgap. Eesti tead akad tehn
fuus 11 no.3:198-202 '62.

1. Academy of Sciences of the Estonian S.S.R., Institute of
Energetics.

PARTS, R.R., inzh.

Performance of asynchronous motors with breaks in the short-circuited rings. Vest.elektroprom. 33 no.6:45-46 Je '62. (MIIA 15:7)
(Electric motors, Induction)

ACCESSION NR: AT4042304

S/0000/63/003/000/0271/0279

AUTHOR: Mezhiburd, V.I., Parts, R.R., Rannu, L. Kh. Tecaru, V. A.

TITLE: A magnetic system for low-power DC high-pressure pumps

SOURCE: Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 3d, Riga, 1962. Voprosy* magnitnoy gidrodinamiki (Problems in magnetic hydrodynamics); doklady* soveshchaniya, v. 3. Riga, Izd-vo AN LatSSR, 1963, 271-279

TOPIC TAGS: pump, direct current pump, high pressure pump, low power pump, electromagnetic pump, pump magnetic system

ABSTRACT: The article deals with the problem of designing a magnetic system for low-power DC high-pressure pumps (on the order of 7 kg/cm^2 and above with a productivity up to $100 \text{ cm}^3/\text{sec}$). Since these pumps make use of a helical channel, their magnetic system most frequently also consists of bodies of rotation (Figures 1 & 2 of the Enclosure). The advantages and disadvantages of the helical-channel magnetic system and the W-shaped system are discussed and it is pointed out that the latter may be considered as consisting of two simpler magnetic systems (See Figure 1). For this reason, greater attention is paid to this system in the present article. The geometry of the magnetic system in the air

1/5

Card

ACCESSION NR: AT4042304

gap is determined and formulas are presented for establishing the length of the polar core L_p . The authors note that in carrying out a verification calculation of a magnetic system, it is also necessary to determine the magnetic dispersion flows and the magnetic conductances. Formulas are given which are applicable to the system shown in Figure 1. It is shown that, once the magnetic flows or conductances have been found, it is a simple task to calculate the dispersion factor and also to determine the magnetic flows in the individual sections of a particular segment of the magnetic circuit. This provides a basis for determining the magnetic inductances in the sections and by means of the latter, in turn, the calculated intensity of the magnetic field may be found, through the use of the basic magnetization curve of the material of which the corresponding segment of the magnetic circuit is manufactured. From this point on, the calculation of the magnetic system of the pump is quite similar to that of the magnetic system of DC electric motors. For the purpose of providing some idea of the order of magnitude of values that might be anticipated, a table is given in the article showing certain data with respect to the magnetic system (See Figure 1) of an experimental direct-current electromagnetic pump developing a pressure of 2 kg/cm^2 with a productivity of $10 \text{ cm}^3/\text{sec}$. Orig. art. has: 1 table, 3 figures and 38 formulas.

2/5
Card

ACCESSION NR: AT4042304

ASSOCIATION: none

SUBMITTED: 04Dec63

ENCL: 02

SUB CODE: IE

NO REF SOV: 004

OTHER: 000

3/5

Card

ACCESSION NR: AT4042304

ENCLOSURE: 01

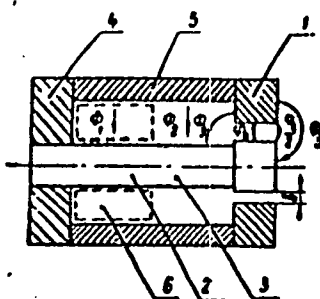


Fig. 1. Magnetic system of low-power DC pump with a helical channel: 1 - external polar terminal; 2 - internal polar terminal; 3 - polar core; 4 - yoke; 5 - external polar core (in the form of a hollow cylinder); 6 - driving coil.

Card 4/5

ACCESSION NR: AT4042305

S/0000/63/003/000/0281/0288

AUTHOR: Mezhiburd, V. I.; R. R. Parts; L. Kh. Rannu; M. M. Saar; V. A. Teearu

TITLE: Design of the channels of low-power high-pressure DC pumps

SOURCE: Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 3d, Riga, 1962. Voprosy* magnitnoy gidrodinamiki (Problems in magnetic hydrodynamics); doklady* soveshchaniya, v. 3. Riga, Izd-vo AN LatSSR, 1963, 281-288.

TOPIC TAGS: direct current pump, high pressure pump, low power pump, electro-magnetic pump, pump channel design, helical pump

ABSTRACT: The authors discuss the various reasons why, when increasing the working pressure of a pump, a channel of linear form is not suitable. The need for a transition from a channel of linear form to one of some other, more rational, configuration is determined primarily by the working pressure and secondarily by the ratio between the working pressure and the productivity of the pump with the hydraulic power remaining constant. The helical channel form is considered at length. It is shown that, by virtue of its special features, the energy specifications of a helical channel are better than those of a linear channel of identical dimensions. The authors analyze some of the peculiarities inherent in

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Cord

ACCESSION NR: AT4042305

the electromagnetic processes which occur in the helical channel. It is demonstrated that the basic peculiarities of the helical pump are due to the closed structural design of the circular gap, the radial direction of the fundamental field in the gap, the dependence of the induction of the fundamental field on the radius, the presence of centrifugal forces in the liquid metal and the presence of an angle of inclination of the helix, which gives rise to a deviation of the velocity vector of the metal from the tangential direction. An equivalent circuit for a helical channel is constructed, on the basis of which expressions are derived from the working current component normal to the side walls of the channel, the tangential component of the current in the channel (along the helix), and certain other factors. In the final section of the paper, the authors take up the problem of the "wall - liquid metal" contact resistance. Details are given of a series of tests conducted to study this problem. The fundamental results of these tests may be summarized as follows: 1. Extreme instability of r_k is observed, particularly for oxide and pure-steel surfaces; 2. The contact resistance possesses attributes of a semiconductive nature; 3. The magnitude of the contact resistance fluctuates from $0.9 \cdot 10^{-6} \text{ ohm} \cdot \text{cm}^2$ for tin-plated steel surfaces to $1 \cdot 10^{-1} \text{ ohm} \cdot \text{cm}^2$ for severely oxidized surfaces; 4. In devices in which there is no special

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Cord

ACCESSION NR: AT4042305

requirement for purity of the mercury, tinning the steel surfaces practically leads to the total disappearance of contact resistance; 5. The contact resistance of surfaces which have not been tinned is unstable in time. Orig. art. has: 3 figures and 20 formulas.

ASSOCIATION: None

SUBMITTED: 04Dec63

ENCL: 00

SUB CODE: IE

NO REF SOV: 005

OTHER: 001

3/3

Cord

MEZHBURD, V.I., inzh.; PARTS, R.R., inzh.

Electromagnetic pumps with a spiral channel. Mashinostroenie
no.3:40-42 My-Je '63. (MIRA 16:7)

1. NISSETI soveta narodnogo khozyaystva Estonskoy SSR.
(Pumping machinery)